



**DEQ AIR QUALITY PROGRAM**  
 1410 N. Hilton, Boise, ID 83706  
 For assistance, call the  
**Air Permit Hotline – 1-877-5PERMIT**

# PERMIT TO CONSTRUCT APPLICATION

Revision 3  
 04/03/07

Please see instructions on page 2 before filling out the form.

COMPANY NAME, FACILITY NAME, AND FACILITY ID NUMBER			
1. Company Name	Tesoro Refining and Marketing Co.		
2. Facility Name	Boise Terminal	3. Facility ID No.	001-00093
4. Brief Project Description - One sentence or less	Modifications to load ethanol or ethanol/gasoline blends at the loading rack.		
PERMIT APPLICATION TYPE			
5. <input type="checkbox"/> New Facility <input type="checkbox"/> New Source at Existing Facility <input type="checkbox"/> Unpermitted Existing Source <input checked="" type="checkbox"/> Modify Existing Source: Permit No.: <u>P-050055</u> Date Issued: <u>May 23, 2006</u> <input type="checkbox"/> Required by Enforcement Action: Case No.: _____			
6. <input checked="" type="checkbox"/> Minor PTC <input type="checkbox"/> Major PTC			
FORMS INCLUDED			
Included	N/A	Forms	DEQ Verify
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Form GI – Facility Information	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Form EU0 – Emissions Units General	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Form EU1 - Industrial Engine Information Please Specify number of forms attached: _____	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Form EU2 - Nonmetallic Mineral Processing Plants Please Specify number of forms attached: _____	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Form EU3 - Spray Paint Booth Information Please Specify number of forms attached: _____	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Form EU4 - Cooling Tower Information Please Specify number of forms attached: _____	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Form EU5 – Boiler Information Please Specify number of forms attached: _____	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Form HMAP – Hot Mix Asphalt Plant Please Specify number of forms attached: _____	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Form CBP - Concrete Batch Plant Please Specify number of forms attached: _____	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Form BCE - Baghouses Control Equipment	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Form SCE - Scrubbers Control Equipment	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Forms EI-CP1 - EI-CP4 - Emissions Inventory– criteria pollutants (Excel workbook, all 4 worksheets)	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	PP – Plot Plan	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Forms MI1 – MI4 – Modeling (Excel workbook, all 4 worksheets)	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Form FRA – Federal Regulation Applicability	<input type="checkbox"/>

DEQ USE ONLY	
Date Received	
Project Number	
Payment / Fees Included? Yes <input type="checkbox"/> No <input type="checkbox"/>	
Check Number	

**Instructions for Form CS**

This form acts as a cover sheet for the Permit to Construct application, providing DEQ with basic information regarding the company and the proposed permitting action. This form helps DEQ efficiently determine whether the application is administratively complete. This form also provides the applicant with a list of forms available to aid the applicant to successfully submit a complete application.

**Company Name, Facility Name, and Facility ID Number**

- 1-3. Provide the name of your company, the name of the facility (if different than company name), and the facility identification (ID) number (Facility ID No.) in the boxes provided. The facility ID number is also known as the AIRS number or AIRS/AFS number (example: 095-00077). If you already have a permit, the facility ID number is located in the upper right hand corner of the cover page. The facility ID number must be provided unless your facility has not received one, in which case you may leave this box empty. **Use these same names and ID number on all forms.** This is useful in case any pages of the application are separated.
4. Provide a brief description of this permitting project in one sentence or less. Examples might be "Install/construct a new boiler" or "Increase the allowable process throughput." **This description will be used by DEQ as a unique identifier for this permitting project, in conjunction with the name(s) and ID number referenced in 1-3.** You will need to put this description, using the exact same words, on all other forms that are part of this project application. This is useful in case any pages of the application are separated.

**Permit Application Type**

5. Provide the reason you are submitting the permit application by checking the appropriate box (e.g., a new facility being constructed, a new source being constructed at an existing facility, an unpermitted existing source (as-built) applying for a permit for the first time, a permitted source to be modified, or the permit application is the result of an enforcement action, in which case provide the case number). If you are modifying an existing permitted source, provide the number and issue date of the most recent permit.
6. Indicate if the application is a minor permit to construct application or a major permit to construct application by checking the appropriate box (e.g., major PTC or minor PTC). If the permit to construct application is for a major new source or major modification, you must ensure that all necessary information required by IDAPA 58.01.01.202, and .204, and .205, as applicable, is provided.

**Forms Included**

Check the "Included" box for each form included in this permit to construct application. If there are multiples of a form for multiple units of that type, check the box and fill in the number of forms in the blank provided.

The "N/A" box should only be checked if the form is absolutely unnecessary to complete the application. Additional information may be requested.

**When complete, submit all application forms and any required fees to:**

Air Quality Program Office – Application Processing  
 Department of Environmental Quality  
 1410 N. Hilton  
 Boise, ID 83706-1255



DEQ AIR QUALITY PROGRAM  
1410 N. Hilton, Boise, ID 83706  
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Air Permit Hotline – 1-877-5PERMIT

**PERMIT TO CONSTRUCT APPLICATION**

Revision 3  
03/26/07

Please see instructions on page 2 before filling out the form.

**All information is required. If information is missing, the application will not be processed.**

**IDENTIFICATION**

1. Company Name	Tesoro Refining and Marketing Co.
2. Facility Name (if different than #1)	Boise Terminal
3. Facility I.D. No.	001-00093
4. Brief Project Description:	Modification to load ethanol or ethanol/gasoline blends at the loading rack.

**FACILITY INFORMATION**

5. Owned/operated by: (✓ if applicable)	<input type="checkbox"/> Federal government <input type="checkbox"/> County government <input type="checkbox"/> State government <input type="checkbox"/> City government
6. Primary Facility Permit Contact Person/Title	Jeff Carter/Terminal Manager
7. Telephone Number and Email Address	(208) 375-5558/jcarter@tsocorp.com
8. Alternate Facility Contact Person/Title	Brooks Neighbors/Environmental Compliance Supervisor
9. Telephone Number and Email Address	210-626-6327/bneighbors@tsocorp.com
10. Address to which permit should be sent	321 North Curtis Road
11. City/State/Zip	Boise, Idaho 83706
12. Equipment Location Address (if different than #10)	Same as above.
13. City/State/Zip	Same as above
14. Is the Equipment Portable?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
15. SIC Code(s) and NAISC Code	Primary SIC: 5171    Secondary SIC (if any):    NAICS:
16. Brief Business Description and Principal Product	Petroleum product storage and distribution
17. Identify any adjacent or contiguous facility that this company owns and/or operates	NA

**PERMIT APPLICATION TYPE**

18. Specify Reason for Application	<input type="checkbox"/> New Facility <input type="checkbox"/> New Source at Existing Facility <input type="checkbox"/> Unpermitted Existing Source <input checked="" type="checkbox"/> Modify Existing Source: Permit No.: <u>P-050055</u> Date Issued: <u>May 23, 2006</u> <input checked="" type="checkbox"/> Permit Revision <input type="checkbox"/> Required by Enforcement Action: Case No.:
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**CERTIFICATION**

IN ACCORDANCE WITH IDAPA 58.01.01.123 (RULES FOR THE CONTROL OF AIR POLLUTION IN IDAHO), I CERTIFY BASED ON INFORMATION AND BELIEF FORMED AFTER REASONABLE INQUIRY, THE STATEMENTS AND INFORMATION IN THE DOCUMENT ARE TRUE, ACCURATE, AND COMPLETE.

19. Responsible Official's Name/Title	Jeff Carter/Terminal Manager	
20. RESPONSIBLE OFFICIAL SIGNATURE		Date: <u>8-11-08</u>
21. <input checked="" type="checkbox"/> Check here to indicate you would like to review a draft permit prior to final issuance.		

## Instructions for Form GI

**This form is used by DEQ to identify a company or facility, equipment locations, and personnel involved with the permit application. Additional information may be requested.**

- 1 – 4. Please fill in the same company name, facility name (if different), facility ID number, and brief project description as on Form CS. This is useful in case any pages of the application are separated.
5. Indicate whether the facility is owned by a government entity.
6. Name of the primary person who should be contacted regarding this permit.
7. Telephone number and e-mail address of person listed in 6.
8. Name of the person who should be contacted if the person listed in 6 is not available.
9. Telephone number and e-mail address of person listed in 8.
- 10 - 11. Address to which DEQ should mail the permit.
- 12 - 13. Physical address at which the equipment is located (if different than 10).
14. If the equipment is portable (such as an asphalt plant), identify by marking "yes." If there are other locations where the portable equipment will be used, attach a Portable Equipment Relocation Form (PERF) to list those locations. An electronic copy of the PERF can be obtained from the DEQ website [http://www.deq.idaho.gov/air/permits\\_forms/forms/ptc\\_relocation.pdf](http://www.deq.idaho.gov/air/permits_forms/forms/ptc_relocation.pdf) (or [http://www.deq.idaho.gov/air/permits\\_forms/forms/ptc\\_relocation.doc](http://www.deq.idaho.gov/air/permits_forms/forms/ptc_relocation.doc) for Word format).  
**Important note:** In addition to being submitted with this PTC application, a PERF must also be completed and filed at DEQ at least 10 days in advance of relocating any of the equipment covered in this application.
15. Provide the Standard Industrial Classification (SIC) code and the North American Industry Classification System (NAICS) code for your plant. NAICS codes can be found at <http://www.census.gov/epcd/naics02/naicod02.htm>. If a secondary SIC code is applicable, provide it also.
16. Briefly describe the primary activity and principal product of your business. If your plant includes more than one major activity, describe the one related with the permit application.
17. Please indicate if there are any other branches or divisions of this company located within 5 miles of the address provided in 12 above on this form.
18. Check the box which describes the type of permit application.
- 19 - 20. Fill in the certification section with a signature, name, title and date. The certification must be signed by a responsible official (as defined in IDAPA 58.01.01.006) in accordance with IDAPA 58.01.01.123.
21. If you would like to review a draft before the final permit is issued, check this box.



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Emissions Unit - General Form EU0

# PERMIT TO CONSTRUCT APPLICATION

Revision 3  
03/27/07

Please see instructions on page 2 before filling out the form.

## IDENTIFICATION

Company Name: Tesoro Refining and Marketing Co.	Facility Name: Boise Terminal	Facility ID No: 001-00093
Brief Project Description:	Modifications to load ethanol or ethanol/gasoline blends at the loading rack.	

## EMISSIONS UNIT (PROCESS) IDENTIFICATION & DESCRIPTION

1. Emissions Unit (EU) Name:	LOADING RACK
2. EU ID Number:	EMISSION UNIT #1
3. EU Type:	<input type="checkbox"/> New Source <input type="checkbox"/> Unpermitted Existing Source <input checked="" type="checkbox"/> Modification to a Permitted Source -- Previous Permit #:P-050055    Date Issued: May 23, 2006
4. Manufacturer:	
5. Model:	
6. Maximum Capacity:	324,000 GALLONS PER HOUR
7. Date of Construction:	
8. Date of Modification (if any)	INSTALLED AN ADDITIONAL LOADING ARM IN 2003
9. Is this a Controlled Emission Unit?	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes    If Yes, complete the following section. If No, go to line 18.

## EMISSIONS CONTROL EQUIPMENT

10. Control Equipment Name and ID:	Vapor Combustion Unit (VCU)					
11. Date of Installation:	2004	12. Date of Modification (if any):	NA			
13. Manufacturer and Model Number:	John Zink Model GV-ZTOF-6200-2					
14. ID(s) of Emission Unit Controlled:	Emission Unit #1					
15. Is operating schedule different than emission units(s) involved?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
16. Does the manufacturer guarantee the control efficiency of the control equipment?	<input type="checkbox"/> Yes <input type="checkbox"/> No    (If Yes, attach and label manufacturer guarantee)					
Control Efficiency	Pollutant Controlled					
	PM	PM10	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO
	NA	NA	NA	NA	90	NA

17. If manufacturer's data is not available, attach a separate sheet of paper to provide the control equipment design specifications and performance data to support the above mentioned control efficiency. The results of the performance test dated August 31, 2005 is included in Appendix H.

## EMISSION UNIT OPERATING SCHEDULE (hours/day, hours/year, or other)

18. Actual Operation	8760 HR/YR
19. Maximum Operation	8760 HR/YR

## REQUESTED LIMITS

20. Are you requesting any permit limits?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No    (If Yes, check all that apply below)
<input type="checkbox"/> Operation Hour Limit(s):	
<input checked="" type="checkbox"/> Production Limit(s):	GASOLINE/ETHANOL LIMIT OF 280,000,000 GAL/YR
<input type="checkbox"/> Material Usage Limit(s):	
<input type="checkbox"/> Limits Based on Stack Testing	Please attach all relevant stack testing summary reports
<input type="checkbox"/> Other:	
21. Rationale for Requesting the Limit(s):	TESORO WOULD LIKE TO REMAIN A SYNTHETIC MINOR SOURCE.

**Instructions for Form EU0**

This form provides DEQ with information about an emissions unit. An emissions unit is the equipment or process that generates emissions of regulated air pollutant(s). This form is used by the permit writer to become familiar with the emissions unit (EU). This form is also used by DEQ to identify the control equipment and the emission point (stack or vent) used for the emission unit(s) proposed in this permit application. This form also asks for supporting documents to verify stated control efficiencies and details about the emission point. Additional information may be requested.

Please put the same company name, facility name (if different), facility ID number, and brief project description as on Form CS in the boxes provided. This is useful in case any pages of the application get separated.

1. Provide the name of the emissions unit (EU), such as "Union boiler," etc. Use the exact same name for this EU throughout all the application forms. A separate EU0 form is required for each emissions unit.
2. Provide the identification (ID) number of the EU. It can be any unique identifier you choose; however, this ID number should be unique to this EU and should be used consistently throughout this application and all other air quality permit applications (e.g., operating permit application) to identify this EU.
3. Indicate the type of EU by checking the appropriate box (e.g., a new source to be constructed, an unpermitted existing source (as-built) applying for the first time, or an existing permitted source to be modified). If the EU is being modified, indicate on the form the most recent permit issued for the EU.
4. Provide the manufacturer's name for the EU. If the EU is custom-designed or homemade, indicate so.
5. Provide the model number of the EU. If the EU is custom-designed or homemade, indicate so.
6. Provide the maximum capacity of the EU. For example, a boiler's capacity may be in MMBtu/hr in terms of heat input of natural gas; an assembly line capacity may be in parts produced per day. Capacity should be based on a rated nameplate or as stated in the manufacturer's literature.
7. The date of construction is the month, day, and year in which construction or modification was commenced.

**Definitions:**

**Construction** fabrication, erection, or installation of an affected facility.

**Commenced** an owner or operator has undertaken a continuous program of construction or modification or that an owner or operator has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction or modification.

**Modification** any physical change in, or change in the method of operation of, an existing facility which increases the amount of any air pollutant (to which a standard applies) emitted to the atmosphere by that facility or which results in the emission of any air pollutant (to which a standard applies) to the atmosphere not previously emitted.

8. If the EU has been or will be modified, provide the month, day, and year of the most recent or future modification as defined in IDAPA 58.01.01.006.55.
9. Indicate if emissions from the EU are controlled by air pollution control equipment. If the answer is yes, complete the next section. If the answer is no, go to line 18.
10. Provide the name of the air pollution control equipment (e.g., wet scrubber) and the control equipment's identification number. This identification number should be unique to this air pollution control equipment and should be used consistently throughout this and all other air quality permit applications (e.g., operating permit application) to identify this air pollution control equipment.

11. Provide the date the air pollution control equipment was installed.
12. If the air pollution control equipment has been modified, provide the date of the modification.
13. Provide the name of the manufacturer and the model number for the air pollution control equipment.
14. If this air pollution control equipment controls emissions from more than this EU, provide the identification number(s) of the other EU(s).
15. Indicate if this air pollution control equipment operates on a schedule different from the EU(s) it controls.
16. Indicate if the air pollution control manufacturer guarantees the control efficiency of the control equipment. If the answer is yes, attach the manufacturer's guarantee and label it with the air pollution control equipment identification number. Indicate the control efficiency for the target pollutant(s).
17. If the control efficiency of the air pollution control equipment is not guaranteed, attach the design specifications and any performance data to support the control efficiency stated in part 16. Label the supporting documentation with the air pollution control equipment identification number.
18. Provide the projected actual operating schedule for the emission unit in hours/day, hours/year, or other.
19. Provide the maximum operating schedule for the emission unit in hours/day, hours/year, or other.
20. If you are requesting to have limits placed on this EU, mark "Yes." Then, check the applicable requested limit(s) and provide the limit(s). For example, production limits may be in terms of parts produced per year, material usage limits may be in gallons per day.
21. Please provide the reason you are requesting limits, if any. This helps DEQ and the applicant determine whether the limits are necessary, and if they will accomplish the desired purpose. Provide supporting documentation (calculations, modeling assessment, regulatory review, etc.) for each limit requested.



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**PERMIT TO CONSTRUCT APPLICATION**

Revision 3  
4/5/2007

Please see instructions on page 2 before filling out the form.

Company Name: Tesoro Refining and Marketing Company

Boise Terminal

Facility Name:

001-00093

Facility ID No.:

Facility ID No.:	
Brief Project Description:	Modifications to load ethanol or ethanol/gasoline blends at the loading rack.

**SUMMARY OF FACILITY WIDE EMISSION RATES FOR CRITERIA POLLUTANTS - POINT SOURCE**

[illegible]

Note: The annual emission rate for the loading rack is the same as current permitted limits. The hourly rate represents average hourly rates based on the current permitted limits.





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4/5/2007

Please see instructions on page 2 before filling out the form.

Company Name: Tesoro Refining and Marketing Company  
Facility Name: Boise Terminal  
Facility ID No.: 001-00093  
Brief Project Description: Modifications to load ethanol or ethanol/gasoline blends at the loading rack.

## SUMMARY OF FACILITY WIDE EMISSION RATES FOR CRITERIA POLLUTANTS - POINT SOURCE

1. Emissions units	2. Stack ID	3. Point Source(s)											
		PM <sub>10</sub>		SO <sub>2</sub>		NO <sub>x</sub>		CO		VOC		Lead	
		lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr

## Instructions for Form EI-CP1

This form is designed to provide the permit writer and air quality modeler with a summary of the criteria pollutant emissions of each emission unit/point located at the facility. This information may be used by the IDEQ to perform an air quality analysis or to review an air quality analysis submitted with the permit application or requested by the IDEQ.

Please fill in the same company name, facility name, facility ID number, and brief project description as on form CS in the boxes provided. This is useful in case any pages of the application get separated.

1. Provide the name of all emission units at the facility. This name must match names on other submittals to IDEQ and within this application.

2. Provide the identification number for the stack which the emission unit exits.

3. Provide the emission rate in pounds per hour and tons per year for all criteria pollutants emitted by this point source. In this form, emission rates for a point source are the maximum allowable emissions for both short term (pounds per hour) and long term (tons per year). These emission rates are its permitted limits (if any). Otherwise, potential to emit should be shown. Potential to emit is defined as uncontrolled emissions at maximum design or achievable capacity (whichever is higher) and year-round continuous operation (8760 hours per year) if there are no federally enforceable permit limits on the emission point. If the emission point has or will have control equipment or some other proposed permit limitation such as hours of operation or material usage, the control efficiency or proposed permit limit(s) may be used in calculating potential to emit.

**NOTE:** Attach a separate sheet of paper, or electronic file, to provide additional documentation on the development of the emission rates. Documentation can include emissions factors, throughput, and example calculations.



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# PERMIT TO CONSTRUCT APPLICATION

Revision 2  
4/5/2007

*Please see instructions on page 2 before filling out the form.*

Company Name:	Tesoro Refining and Marketing Company
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Facility Name:	Boise Terminal
	001-00093

Facility ID No.: \_\_\_\_\_

Brief Project Description:	Modifications to load ethanol or ethanol/gasoline blends at the loading rack.
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### SUMMARY OF FACILITY WIDE EMISSION RATES FOR CRITERIA POLLUTANTS - FUGITIVE SOURCE

[illegible]



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**PERMIT TO CONSTRUCT APPLICATION**

Revision 2  
4/5/2007

Please see instructions on page 2 before filling out the form.

Company Name: **Tesoro Refining and Marketing Company**  
Facility Name: **Boise Terminal**  
Facility ID No.: **001-00093**  
Brief Project Description: **Modifications to load ethanol or ethanol/gasoline blends at the loading rack.**

**SUMMARY OF FACILITY WIDE EMISSION RATES FOR CRITERIA POLLUTANTS - FUGITIVE SOURCE**

3.													
1.	2.	PM <sub>10</sub>		SO <sub>2</sub>		NO <sub>x</sub>		CO		VOC		Lead	
Fugitive Source Name	Fugitive ID	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr
Fugitive Source(s)													

**Instructions for Form EI-CP2**

This form is designed to provide the permit writer and air quality modeler with a summary of the criteria pollutant emissions of each emission unit/point located at the facility. This information may be used by the IDEQ to perform an air quality analysis or to review an air quality analysis submitted with the permit application or requested by the IDEQ.

Please fill in the same company name, facility name, facility ID number, and brief project description as on form CS in the boxes provided. This is useful in case any pages of the application get separated.

Fugitive emissions are those emissions that cannot reasonably be made to pass through a stack or vent or equivalent opening. Examples include coal piles, unpaved roads, etc. Fugitive emission sources at your plant must be included in this form.

1. Provide the name of all fugitive sources at the facility. This name must match names on other submittals to IDEQ and within this application.
2. Provide the identification number for the fugitive source. This ID number should match ID numbers on other submittals to IDEQ and within this application.
3. Provide the emission rate in pounds per hour and tons per year for all criteria pollutants emitted by this fugitive source. In this form, emission rates for a fugitive source are the maximum allowable emissions for both short term (pounds per hour) and long term (tons per year). These emission rates are its permitted limits (if any). Otherwise, potential to emit should be shown. Potential to emit is defined as uncontrolled emissions at maximum design or achievable capacity (whichever is higher) and year-round continuous operation (8760 hours per year) if there are no federally enforceable permit limits on the emission point. If the emission point has or will have control equipment or some other proposed permit limitation such as hours of operation or material usage, then, the control efficiency or proposed permit limit(s) may be used in calculating potential to emit.

NOTE: Attach a separate sheet of paper, or electronic file, to provide additional documentation on the development of the emission rates. Documentation can include emissions factors, throughput, and example calculations.



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# PERMIT TO CONSTRUCT APPLICATION

Revision 3  
4/5/2007

Please see instructions on page 2 before filling out the form.

Company Name:	Tesoro Refining and Marketing Company
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## Boise Terminal

Facility Name:

001-00093

Facility ID No.:

Facility ID No.:	
Brief Project Description:	Modifications to load ethanol or ethanol/gasoline blends at the loading rack.

**SUMMARY OF EMISSIONS INCREASE (PROPOSED PTE - PREVIOUSLY MODELED PTE) - POINT SOURCE**

[illegible]



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Company Name: **Tesoro Refining and Marketing Company**  
Facility Name: **Boise Terminal**  
Facility ID No.: **001-00093**  
Brief Project Description: **Modifications to load ethanol or ethanol/gasoline blends at the loading rack.**

**SUMMARY OF EMISSIONS INCREASE (PROPOSED PTE - PREVIOUSLY MODELED PTE) - POINT SOURCE**

1.	2.	3.											
		PM <sub>10</sub>		SO <sub>2</sub>		NO <sub>x</sub>		CO		VOC		Lead	
Emissions units	Stack ID	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr
Point Source(s)													

**Instructions for Form EI-CP3**

This form is designed to provide the permit writer and air quality modeler with a summary of the change in criteria pollutant emissions of each emission unit/point associated with the permit application. This information may be used by the IDEQ to perform an air quality analysis or to review an air quality analysis submitted with the permit application or requested by the IDEQ.

Please fill in the same company name, facility name, facility ID number, and brief project description as on form CS in the boxes provided. This is useful in case any pages of the application get separated.

1. Provide the name of the emission unit. This name should match names on other submittals to IDEQ and within this application.

2. Provide the identification number for the stack which the emission unit exits.

3. Provide the increase in emissions in pounds per hour and tons per year for all criteria pollutants emitted by this emission unit. In this form, increase in emissions for an emission unit are the proposed PTE - Previously modeled PTE. If the emission point has or will have control equipment or some other proposed permit limitation such as hours of operation or material usage, then, the control efficiency or proposed permit limit(s) may be used in calculating proposed potential to emit.

NOTE: Attach a separate sheet of paper, or electronic file, to provide additional documentation on the development of the emission rates. Documentation can include emissions factors, throughput, and example calculations.



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Company Name:	Tesoro Refining and Marketing Company	
Facility Name:		Boise Terminal
Facility ID No.:		001-00093
Brief Project Description:	Modifications to load ethanol or ethanol/gasoline blends at the loading rack.	

**SUMMARY OF EMISSIONS INCREASE (PROPOSED PTE - PREVIOUSLY MODELED PTE) - FUGITIVE SOURCE:**

[illegible]



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**PERMIT TO CONSTRUCT APPLICATION**

Revision 3  
4/5/2007

Please see instructions on page 2 before filling out the form.

Company Name: **Tesoro Refining and Marketing Company**      Boise Terminal  
Facility Name: **Boise Terminal**  
Facility ID No.: **001-00093**  
Brief Project Description: **Modifications to load ethanol or ethanol/gasoline blends at the loading rack.**

**SUMMARY OF EMISSIONS INCREASE (PROPOSED PTE - PREVIOUSLY MODELED PTE) - FUGITIVE SOURCE:**

SUMMARY OF EMISSIONS INCREASE (PROPOSED PTE - PREVIOUSLY MODELLED PTE) - FUGITIVE SOURCE													
1.	2.	3. Air Pollutant Maximum Change in Emissions Rate (lbs/hr or t/yr)											
		PM <sub>10</sub>		SO <sub>2</sub>		NO <sub>x</sub>		CO		VOC		Lead	
		lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr
Fugitive Source Name	Fugitive ID												
Fugitive Source(s)													

Fugitive Source(s)


**Instructions for Form EI-CP4**

This form is designed to provide the permit writer and air quality modeler with a summary of the change in criteria pollutant emissions of each emission unit/point associated with the permit application. This information may be used by the IDEQ to perform an air quality analysis or to review an air quality analysis submitted with the permit application or requested by the IDEQ.

Please fill in the same company name, facility name, facility ID Number, and brief project description as on Form CS in the boxes provided. This is useful in case any pages of the application get separated.

1. Provide the name of the emission unit. This name should match names on other submittals to IDEQ and within this application.
2. Provide the identification number for the fugitive source. This ID should match IDs on other submittals to IDEQ and within this application.
3. Provide the increase in emissions in pounds per hour and tons per year for all criteria pollutants emitted by this fugitive source. In this form, increase in emissions for an emission unit are the proposed PTE - Previously modeled PTE. If the fugitive source has or will have control equipment or some other proposed permit limitation such as hours of operation or material usage, the control efficiency or proposed permit limit(s) may be used in calculating proposed potential to emit.

NOTE: Attach a separate sheet of paper, or electronic file, to provide additional documentation on the development of the emission rates. Documentation can include emissions factors, throughput, and example calculations.

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	<i>Please see instructions on page 2 before filling out the form.</i>	

Company Name:	Tesoro Refining and Marketing Co.
Facility Name:	Boise Terminal
Facility ID No.:	001-00093
Brief Project Description:	Modifications to load ethanol or ethanol/gasoline blends at the loading rack.

### SUMMARY OF AIR IMPACT ANALYSIS RESULTS - CRITERIA POLLUTANTS

		1.		2.	3.	4.		5.
Criteria Pollutants	Averaging Period	Significant Impact Analysis Results (µg/m3)	Significant Contribution Level (µg/m3)	Full Impact Analysis Results (µg/m3)	Background Concentration (µg/m3)	Total Ambient Impact (µg/m3)	NAAQS (µg/m3)	Percent of NAAQS
PM <sub>10</sub>	24-hour	NA	5	NA	NA	NA	150	NA
	Annual	NA	1	NA	NA	NA	50	NA
SO <sub>2</sub>	3-hr	NA	25	NA	NA	NA	1300	NA
	24-hr	NA	5	NA	NA	NA	365	NA
	Annual	NA	1	NA	NA	NA	80	NA
NO <sub>2</sub>	Annual	NA	1	NA	NA	NA	100	NA
CO	1-hr	NA	2000	NA	NA	NA	10000	NA
	8-hr	NA	500	NA	NA	NA	40000	NA

\* As criteria pollutants are not expected to increase from the proposed project, a modeling analysis was only done for TAP emissions.



# Instructions for Form MI1

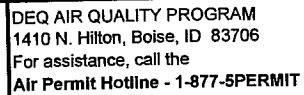
This form is designed to provide the air quality modeler with a summary of the air impact analysis results for the criteria pollutants. This information will be used by IDEQ to determine compliance demonstration with the national ambient air quality standards (NAAQS).

Please fill in the same company name, facility name, facility ID number, and brief project description as on Form CS in the boxes provided. This is useful in case any pages of the application get separated.

**Significant Impact Analysis** -Evaluates the emissions increase from the proposed project only. This analysis determines whether or not a proposed project has a significant impact on ambient air, and therefore, requires a full impact analysis.

**Full Impact Analysis** - Only required if the significant impact analysis exceeds the significant contribution level - evaluates the emissions from the facility, including the emissions increase from the proposed project. This analysis determines whether the facility, with the emissions increase, complies with the NAAQS.

1. Provide the results of the significant impact analysis in  $\mu\text{g}/\text{m}^3$ .
2. Provide the results of the full impact analysis in  $\mu\text{g}/\text{m}^3$  (if required).
3. List the background concentration in  $\text{mg}/\text{m}^3$ . Contact the Stationary Source Modeling Coordinator at (208) 373-0502 for the current background concentrations for the area of interest. (Not needed if full impact analysis is not required.)
4. Provide the total ambient impact in  $\text{mg}/\text{m}^3$ . The total ambient impact is the sum of the background concentration and the full impact analysis result.
5. Calculate the percent of the NAAQS that the total ambient impact analysis represents.

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*Please see instructions on page 2 before filling out the form*

**Tesoro Refining and Marketing Co.**

Boise Terminal

001-00093

Modifications to load ethanol or ethanol/gasoline blends at the loading rack.

### POINT SOURCE STACK PARAMETERS

[illegible]

## Instructions for Form MI2

This form is designed to provide the air quality modeler with information on the stack characteristics of each point source located at the facility. This information may be used by the IDEQ to perform an air quality analysis or to review an air quality analysis submitted with the permit application or request by the IDEQ.

Please fill in the same company name, facility name, facility ID number, and brief project description as on Form CS in the boxes provided. This is useful in case any pages of the application get separated.

1. Provide the name of the emission unit. This name should match names on other submittals to IDEQ and within this application.
2. Provide the identification number for the stack which the emission unit exits.
3. Provide the UTM locations for each point source. The UTM Easting and UTM Northing are the coordinates for the center of the point source.
4. Provide the elevation of the base of the stack. This elevation must be calculated by the same method as the buildings and receptor elevation.
5. Provide the height of the stack, from the ground.
6. Provide the stack diameter that is included in the modeling analysis. Refer to the State of Idaho Modeling Guideline for guidance on developing the appropriate diameter.
7. Provide the stack exit temperature. Include documentation and justification for the exit temperature used.
8. Provide the stack exit flowrate. Include documentation and justification for the exit flowrate used.
9. Provide the stack exit velocity. Include documentation and justification for the exit velocity used.
10. Provide the orientation of the stack (horizontal or vertical). Indicate whether there is an obstruction on the stack, such as a raincap.



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# PERMIT TO CONSTRUCT APPLICATION

Revision 3  
4/5/2007

*Please see instructions on page 2 before filling out the form.*

**Company Name:**

**Tesoro Refining and Marketing Co.**

Facility Name:

Boise Terminal

Facility ID No.:

001-00093

### Brief Project Description:

### Modifications to load ethanol or ethanol/gasoline blends at the loading rack.

### FUGITIVE SOURCE PARAMETERS

[illegible]

### Instructions for Form MI3

This form is designed to provide the air quality modeler with information on the characteristics of each fugitive source located at the facility. This information may be used by the IDEQ to perform an air quality analysis or to review an air quality analysis submitted with the permit application or requested by the IDEQ.

Please fill in the same company name, facility name, facility ID number, and brief project description as on Form CS in the boxes provided. This is useful in case any pages of the application get separated.

Fugitive sources are typically modeled as either area or volume sources. Area sources are used to model fugitives from sources such as roads or parking lots, while volume sources are typically used to model fugitives from piles. Refer to the State of Idaho Air Quality Modeling Guideline for additional guidance on modeling fugitive sources.

1. Provide the name of the fugitive source. This name should match names used on other submittals to IDEQ and within this application.
2. Provide the identification number for the fugitive source.
3. Provide the UTM locations of the fugitive source. The UTM Easting and UTM Northing are the coordinates for the center of the fugitive source.
4. Provide the elevation of the base of the fugitive source. This elevation must be calculated by the same method as the buildings and receptor elevation.
5. Provide the height of the fugitive source, from the ground. This is used for an elevated release. If the fugitive source is at ground level enter zero.
6. Provide the easterly length of the fugitive source.
7. Provide the northly length of the fugitive source.
8. Provide the angle from north, in degrees. This allows for accurate evaluation of the alignment of the fugitive source.
9. Provide the initial vertical dimension of the fugitive source. Refer to the State of Idaho Modeling Guideline for guidance on estimating this value.
10. Provide the initial horizontal dimension of the fugitive source. This parameter is only used for volume sources. Refer to the State of Idaho Modeling Guideline for guidance on estimating this value.

*Please see instructions on page 2 before filling out the form.*

Facility ID No.:	
Brief Project Description:	Modifications to load ethanol or ethanol/gasoline blends at the loading rack.

## BUILDING AND STRUCTURE INFORMATION

Page 7

# Instructions for Form MI4

This form is designed to provide the air quality modeler with information on the buildings and structures located at the facility. This information may be used by the IDEQ to perform an air quality analysis or to review an air quality analysis submitted with the permit application or requested by the IDEQ.

Please fill in the same company name, facility name, facility ID number, and brief project description in the boxes provided. This is useful in case any pages of the application get separated.

1. Provide the building ID number.
2. Provide the length of the building.
3. Provide the width of the building.
4. Provide the base elevation of the building. This elevation must be calculated by the same method as the sources and receptor elevation.
5. Provide the height of the building, from the ground.
6. Provide the number of tiers on the building. Refer to the State of Idaho Modeling Guideline for guidance on this topic.
7. Provide a description of the building.